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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,291	05/11/2001	Ronald S. Lenox	A148 1605	6050

7590 03/18/2003

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EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/18/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-5

Office Action Summary

Application No.

09/853,291

Applicant(s)

LENOX ET AL.

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-42, 46 and 50-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4; claim 11, line 3; claim 22, line 5; and claims 46, 51-52, line 3 of each claims, the phrase "control melt-processed" is vague and indefinite, i.e., it is not clear the scope of "control melt-processed". Also, in claim 30, line 3; and claim 52, line 5, the phrase "control surface covering" is vague and indefinite.

In claims 1-10, 19, 39, 47-51, the structural relation between the layers, i.e., in what order ^{are} the layers adhered together, is vague, indefinite and confusing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admission either taken individually, or in view of Love (US 3969469).

It appears that Applicants admit that multi-layered polymeric sheets have been widely used as resilient surface coverings, especially to cover floors. Some multi-layer resilient surface coverings include melt-processed base layers formed of resins composed of polyvinyl chloride (PVC) homopolymer, which provide strength and durability to the surface covering sheet (Specification, page 1, lines 16-21).

For claims 1-54, the Examiner takes Official Notice that improving the impact resistance of PVC by blending with a compatible elastomer is old and well known. Alternatively, Love's invention is directed to resinous compositions that have excellent melt flow characteristics and high impact resistance which contain 70 to 90 percent by weight of a vinyl halide resin, 5 to 15 percent by weight of an elastomer that is a styrene-butadiene-alkyl methacrylate polymer or a partially cross-linked alkyl methacrylate polymer, and 5 to 15 percent by weight of a thermoplastic resin that is a styrene-acrylonitrile copolymer or a styrene-acrylo-nitrile-alkyl methacrylate terpolymer (Abstract). Additionally, it is believed that incorporating a wear layer and a foamed layer in a multilayered surface or floor covering is also common knowledge. As such, it would have been obvious to one of ordinary skill in the art to modify the PVC homopolymer of the prior art with a suitable amount of the impact modifier elastomers, as taught by Love, motivated by the desire to improve the impact toughness of the surface coverings.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In addition, the following references are cited of interest for making PVC surface coverings:

US 4402887 to Kuriyama et al.

US 4537805 to Lin

JP 67017094B (Derwent Abstract)

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC
March 11, 2003

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP ~~1300~~
1700

Daniel Zinker